

PERMIT NO.:

Date Rec'd.:

Amount Rec'

Check No.:

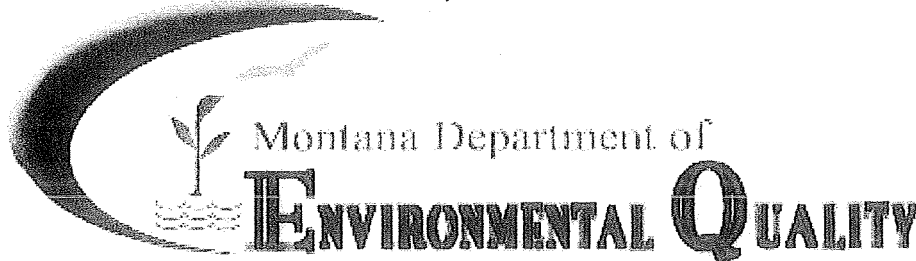
Rec'd By:

MTG 010153

12/9/13

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PD



## WATER PROTECTION BUREAU

FORM  
NOI

# Notice of Intent (NOI) for Montana Pollution Discharge Elimination System Application for New and Existing Concentrated Animal Feeding Operations

The Application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO) or Aquatic Animal Production Facility. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete will be returned. You must maintain a copy of the completed application form for your records.

## Section A - Application Status (Check one):

- ☐ New No prior application submitted for this site.  
☐ Resubmitted Permit Number: MTG \_\_\_\_\_  
☒ Renewal Permit Number: MTG 0 1 0 1 5 3  
☐ Modification Permit Number: MTG \_\_\_\_\_

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## Section B - Facility or Site Information (See instruction sheet.):

Site Name pleasant Valley ColonySite Location 734 McCoy RoadNearest City or Town Belt MT 59412County CascadeLatitude 111° 02'59NLongitude 47° 20'21NDate Facility began operation? 1987Is this facility or site located on Indian Lands? ☐ Yes ☒ No

## Section C - Applicant (Owner/Operator) Information:

Owner or Operator Name Peter J. Wipf / Mike J. HoferMailing Address 734 McCoy RoadCity, State, and Zip Code Belt MT 59412Phone Number 1-406-736-5205 ext.606Is the person listed above the owner? ☒ Yes ☐ NoStatus of Applicant (Check one) ☐ Federal ☐ State ☒ Private ☐ Public ☐ Other (specify) \_\_\_\_\_

COPY

**Section D - Existing or Pending Permits, Certifications, or Approvals:** ☐ None☐ MPDES MTG010153☐ RCRA☐ PSD (Air Emissions)☐ Other☐ 404 Permit (dredge & fill)☐ Other**Section E - Standard Industrial Classification (SIC) Codes:**

Provide at least one SIC code which best reflects the activity of project described in Section H.

Code	A. Primary	Code	B. Second
1	2.4mil. glass lined slurry (1994)	2	1.9mil.concrete slurry tank (2010)
Code	C. Third	Code	D. Fourth
3	Renovated Dairy 2007	3	Renovated Hog barn 2005/2010

**Section F - Facility or Site Contact Person/Position:**Name and Title, or Position Title Operator. Peter J. Wipf Mike J. HoferMailing Address 734 McCoy RoadCity, State, and Zip Code Belt MT 59412Phone Number 1-406-736-5205 ext.606**Section G - Receiving Surface Waters(s):**

Outfall/Discharge Locations: For each outfall, List latitude and longitude to the nearest second and the name of the receiving waters

Outfall Number	Latitude	Longitude	Receiving Surface Waters
001	47°20'26.9"N	111°2'28.49W	Unnamed drainage of Spring Creek.
002			
003			
004			
005			

Map: Attach a topographic map extending one mile beyond the property boundaries or the site activity identified in Section B depicting the facility or activity boundaries, major drainage patterns, and the receiving surface waters, stated above. Also identify the specific location of the production area, and land application area(s).

Is the receiving water on the 303(d) list for nutrients (nitrogen and/or phosphorus)

☐ Yes ☒ No**RECEIVED**

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**Section H – Concentration Animal Feeding Operation Characteristics****Waste Production, Storage and Disposal**

Animal type	Number in Open Confinement	Number Housed Under Roof
<input type="checkbox"/> Mature Dairy Cows	60	250
<input type="checkbox"/> Dairy Heifers	135 5months max.	15
<input type="checkbox"/> Veal Calves	250 in wtr. 5 months max	100
<input type="checkbox"/> Cattle (not dairy or veal)	400 60 days max	
<input type="checkbox"/> Swine (55 lbs or over)		2100
<input type="checkbox"/> Swine (55 lbs or under)		1600
<input type="checkbox"/> Horses		
<input type="checkbox"/> Sheep or Lambs		
<input type="checkbox"/> Turkeys	500	
<input type="checkbox"/> Chickens (broilers)		900
<input type="checkbox"/> Chickens (layers)		8200
<input type="checkbox"/> Ducks	900	
<input type="checkbox"/> Other (Specify: _____)		
<input type="checkbox"/> Other (Specify: _____)		
<input type="checkbox"/> Other (Specify: _____)		

**Manure, Litter and/or Wastewater Production and Use.**

How much manure, litter, and process wastewater is generated annually by the facility?

Solid (tons): 1050 tons Liquid/Slurry (gallons): 6,950,000

If land applied, how many acres of land under control of the permit applicant are available to apply the manure, litter, or process wastewater generated from the facility? (Note: Do not include setback distances in available acreage)  
2600 Acres

How much manure, litter, and process wastewater is transferred to other persons per year? (estimated) Solid (tons): none Liquid/Slurry (gallons): none

Were the containment structures built after February 2006?

- ☒ Do the waste containment structures have 10 feet of separation between the pond bottom and any bedrock formations?
- ☒ Do the waste containment structures have 4 feet of separation from the pond bottom and any ground water?
- ☐ Were any of the waste containment structures built within 500 feet of any existing well?

**Section J - CERTIFICATION****Permittee Information:**

This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

**All Permittees Must Complete the Following Certification:**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

**A. Name (Type or Print)**

Peter J. Wipf Mike J. Hofer

**B. Title (Type or Print)**

Operator

C. Phone No. *ext. 606*  
1-406-736-5205

**D. Signature**

*Peter J. Wipf*

*Mike J. Hofer*

**E. Date Signed**

11-29-2013

*The Department will not process this form until all of the requested information is supplied and the appropriate fees are paid. Return this form (NOI) and the applicable fee to:*

Department of Environmental Quality  
Water Protection Bureau  
PO Box 200901  
Helena, MT 59620-0901  
(406) 444-3080

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## AGENCY USE ONLY

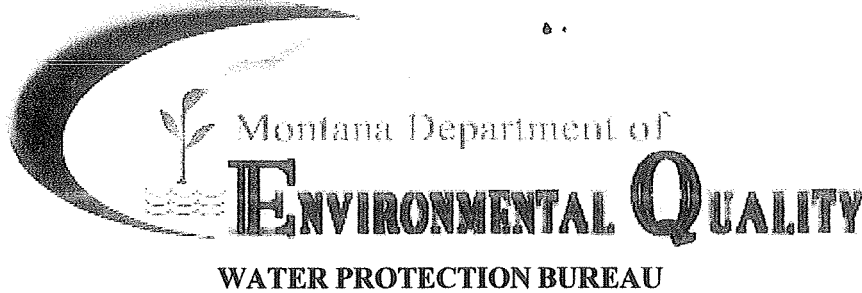
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Rec'd By:

FORM  
NMP

## Nutrient Management Plan

**READ THIS BEFORE COMPLETING FORM:** Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For filling out Form NMP," found at the back of this form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your NOI-CAFO. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. The 2013 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or <http://www.deq.mt.gov/wqinfo/MPDES/CAFO.asp>

## Section A – NMP Status:

- ☐ New No prior NMP submitted for this site.
- ☐ Resubmitted Previous NMP found incomplete.
- ☐ Modification Change or update to existing NMP.
- ☒ New 2013 New 2013 version of NMP.

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## Section B – Facility Information:

Facility Name Pleasant Valley ColonyFacility Location 734 Mc Coy RoadNearest City of Town Belt, MT 59412County Cascade

## Section C – Applicant (Owner/Operator Information):

Owner or Operator Name Peter J. Wipf Mike J. HoferMailing Address 734 Mc Coy RoadCity, State, and Zip code Belt, MT 59412Facility Phone Number 1-406-736-5205 ext. 606Email None

## Section D – NMP Minimum Elements:

1. Livestock Statistics		
Animal Type and number of animals	# of Days on Site (per year)	Annual Manure Production (tons, cu. yds. or gal)
<i>Beef cows 400</i>	<i>45-50 days in open confinement</i>	
1. Hogs 55 lbs. or over 2100	365 days	Total for all hogs:
2. Hogs 55 lbs. or under 1600	365 days	3,500,000 gal.
3. Dairy cows 250/35 in open	confinement. 365days	Total for all cows:
4. Dairy hfrs. 150/135 in open	confinement. 165 days	3,200,000 gal.
5. Veal calves 250/150 in ope	confinement. 200 days	
6. Ducks 900	120 days	8 tons
7. Layerchicken&broilers9100	365 days	15 tons
8. Turkeys 500	140 days	3 tons

Method used for estimating annual manure production:

We have a flow meter in place that reads gallons. Updated last year.

## 2. Manure Handling

### a. Describe Manure handling at the facility:

Manure is piped out to field with pipeline and then injected into ground with plow. Some sections are drained each week to 2 above ground slurry tanks.

### b. Frequency of Manure Removal from confinement areas:

It varies from once a week to every 6 weeks.

### c. Is this manure temporarily stored in any location other than the confinement area? ☒ Yes ☐ No

If so then how and where?

It is pumped to a (180 day storage) slurry tank. /Most of the straw pack is stored in lots where cattle are confined in. It is then hauled in spring and fall. Those same lots are contained with dirt berms or concrete walls and that water is piped to a evaporative pond.

### d. Is manure stored on impervious surface? ☒ Yes ☐ No

If yes, describe type and characteristics of this surface:

The rest of the straw pack(which is not much) is stored in location where there is a adequate filter strip of brush and grass. No water way close by.

**3. Waste Control Structures**

Waste Control Structures (name/type)	Length (ft.)	Width (ft.)	Depth (ft.)	Volume (cubic ft. or gallons)	Number of days of storage
1. Slurry store		120	28	2,240,000	180
2. Slurry store		150	16	2,000,000	180
3. Layer barn pit	56	16	7	49,000 gal.	70
4. Open lot	275	285		1,000 tons	180
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

What is the 24 hr. 25 yr. storm event at this facility 2.5 inches

Production area: 8 acres. Type of lot (dirt or paved): dirt

Area contributing drainage form outside CAFO that enters confinement areas and waste storage, conveyance, or treatment structures: 0 acres.

What is the annual precipitation during the critical storage period 7-10 inches

How much freeboard do the pond(s) have 1 foot

**4. Disposal of Dead Animals.**

Describe how dead animals are disposed of at this facility:

Depending on season. Some are buried in trenches and covered right away. At other times they are buried in compost pile.

## **5. Clean Water Diversion Practices**

**Describe how clean water is diverted from production area:**

Gutters are recently installed and piped away from corrals. We isolated corral water from rain water by erecting dirt berms and concrete walls.

## **6. Prohibiting Animals and Wastes from Contact with State Waters**

**Describe how animals and wastes are prohibited from direct contact with state waters:**

All animals are housed in buildings and dry lots. All water from lots is diverted to a holding pond.

**Describe how Chemicals and other contaminants are handled on-site:**

Chemicals are stored in enclosed buildings on concrete floors in a separate building.

## **7. Best Management Practice (BMPS)**

Describe in detail all temporary, permanent and structural BMPS which will be used to control runoff of pollutants from facility's production area. Indicate the location of these measures. If BMPS are not installed include a schedule for implementation of each of these measures. Examples of BMP measures could include but are not limited to: constructing ditches, terraces, and waterways above and open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area; decreasing open lot surface area; repairing or adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.

**Production Area BMP's**

We recently constructed dirt berms and concrete walls so water from lots cannot contaminate other fresh water. the contaminated water is piped to a containment pond. We installed gutters and piped that water out of lots. We use water to cool milk through a plate cooler and use "gray water" to wash holding area facilities.

Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's land production area. Indicate the location of these practices. If not already in use, include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites;



### Section E – Land Application

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

- ☒ Yes If yes, then the information requested in Section E must be provided.  
☐ No If no, then provide an explanation of how animal waste at this facility are managed.

#### Photos and/or Maps

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"X 17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any downgradient surface waters.
- The location of any downgradient open tile line intake structures
- The location of any downgradient sinkholes
- The location of any downgradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

#### Land Application Equipment Calibration

Describe the type of equipment used to land apply wastes and the calibration procedures:

A truck that holds 3400 gal; 10 ton straw spreader; plow to inject manure with flow meter.

#### Manure Sampling and Analysis Procedures

A representative manure sample will be analyzed a minimum of once annually for Total Nitrogen, and Total Phosphorus. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to ARM 17.30.1334

Other (describe)

We use Harris Lab. for manure samples and AGVISE for soil samples.

#### Soil Sampling and Analysis Procedures

Representative soil (composite) samples from the top 6 inches layer of soil for each field where manure will be applied must be analyzed for phosphorus content at least once every three years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater

Soil samples collection will occur according the methods in ARM 17.30.1334

Other (describe)

We use 24 inch probe on soil samples. Manure from slurry is collected at halfway point and sent to lab

#### Phosphorus Risk Assessment

The permittee shall assess the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or

2013 chicken manure middle block

Tract 8205

# Nutrient Budget Worksheet

Field identification: Tract 8205 Year: 2013 Crop: Winter wheat

Expected Crop Yield: 50 bu.

Phosphorus index results or Phosphorus application from soil test:

Method of Application: Injection

When will application occur: Apr. - Oct.

Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	information
1		Crop Nutrient Needs, lbs/acre	130 <sup>#</sup>	32	Fert. guidelines
2	(-)	Credits from previous legume crops, lbs/ac	none	none	no legume crops
3	(-)	Residuals from past manure production lbs/acre	62	19	soil sample
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	none	none	NA
5	(-)	Nutrients supplied in irrigation water, lbs/acre	NA	NA	NA
6		= Additional Nutrients Needed, lbs/acre	68	13	Fert. guidelines
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	40.8	19.8	manure sample
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	90%	100%	1 Leg. 9
9		= Available Nutrients in Manure, lbs/ton or lbs/1000 gal	36.72	19.8	manure sample
10		Additional Nutrients needed, lbs/acre (calculated above)	68	13	Guidelines
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	36.72	19.8	manure sample
12		= Manure Application Rate, tons/acre or 1000 gal/acre	185/gal	656 gal.	manure + soil sample

Comments:

rejected 250,000 gal on 50 acres = 5,000 gal an acre  
will over apply because of limited fallow ac.



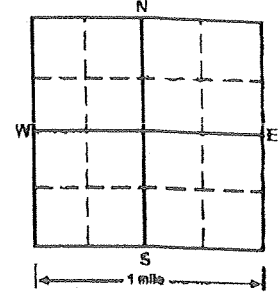
Soil Analysis by: Agvise Laboratories  
Northwood: (701) 587-8010  
Benson: (320) 843-4109

## SOIL TEST REPORT

FIELD WEST SHANNON  
SAMPLE CNTY  
TWP  
SEC 0 QTR ACRES 0  
PREV CROP

REF# 11778182 LAB# 68030 BOX# 0

### Field Location



SUBMITTED FOR:

PVC PETER

SUBMITTED BY: MO4720

MT. VIEW COOP-GREAT FALLS  
1700 62ND ST N  
GREAT FALLS, MT  
59406

Date Sampled:

9/27/2010

Date Received:

9/30/2010

Date Reported:

10/2/2010

### NUTRIENT IN SOIL

0-8" 20 lb/ac  
6-24" 42 lb/ac  
0-24" 82 lb/ac

Nitrate

Olsen

49 ppm

Phosphorus

308 ppm

Potassium

Chloride

Sulfur

Boron

Zinc

Iron

Manganese

Copper

Magnesium

Calcium

Sodium

Org. Matter

3.3 %

Carbonate

0-6"

0.36 mmho/cm

6-24"

0.32 mmho/cm

Sol. Salts

### INTERPRETATION

VLow Low Med High

### 1st CROP CHOICE

Yield Goal

### SUGGESTED GUIDELINES

LB/ACRE

APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

### 2nd CROP CHOICE

Yield Goal

### SUGGESTED GUIDELINES

LB/ACRE

APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

### 3rd CROP CHOICE

Yield Goal

### SUGGESTED GUIDELINES

LB/ACRE

APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

Soil pH

Buffer pH

Cation  
Exchange  
Capacity

### % Base Saturation(Typical Range)

% Ca

% Mg

% K

% Na

% H

7.8



# AgSource Laboratories

A Subsidiary of Cooperative Resources International

1532 Dewitt  
Ellsworth, IA 50075  
Tel: 515-836-4444  
Fax: 515-836-4541

## REPORT OF ANALYSIS

<b>Submitted By:</b>		
PLEASANT VALLEY COLONY		
734 MCCOY RD		
BELT	MT	59412

<b>Sample Type:</b>	Manure
<b>Submitted For:</b>	
PLEASANT VALLEY COLONY / CHICKEN SLURRY	

<b>Date Received</b>	<b>Date Reported</b>
5/16/2013	5/20/2013

<b>Acct No</b>	<b>Laboratory Sample No.</b>
LINC21	16048

### REPORT OF ANALYTICAL RESULTS

#### Client Sample Identification

BLNK

	Analysis As Received	Nutrients as Lbs/1000 gal
Organic Nitrogen, % N	0.12 %	10.3
Ammonium, % N	0.37 %	30.5
Nitrate, % N	%	
Total N (TKN), % N	0.49 %	40.8
Phosphorus, % P2O5	0.24 %	19.8
Potassium, % K2O	0.24 %	20.1
Sulfur, % S	0.03 %	2.3
Calcium, % Ca	0.32 %	26.6
Magnesium, % Mg	0.04 %	3.4
Sodium, % Na	0.05 %	4.2
Zinc, ppm Zn	25 ppm	0.2
Iron, ppm Fe	65.2 ppm	0.5
Manganese, ppm Mn	33.9 ppm	0.3
Copper, ppm Cu	4.1 ppm	0
Soluble Salts, mmho/cm		
pH		
Moisture, %	94.62 %	
Dry Matter, %	5.38 %	

1 72.0 HBL

2 75.3 HBL

Farm: 6347  
Tract: 8205  
legal: 33 19N 5E

*Joe South*

Cascade County FSA

May 7, 2007



2013

ward

Vainy manure

## Nutrient Budget Worksheet

Field identification: 18, 19, 17, 16, 15 Year: 2013 Crop: winter wheat

Expected Crop Yield: 50 bu.

Phosphorus index results or Phosphorus application from soil test: 29

Method of Application: injection

When will application occur: Apr. and Sept.

Nutrient Budget

Nitrogen-based  
ApplicationPhosphorus-  
based  
ApplicationSource of  
information

1

Crop Nutrient Needs,  
lbs/acre130<sup>th</sup> from  
guidelines

31

Fertilizer  
guidelines

2

(-) Credits from previous  
legume crops, lbs/ac

none

none

No legume crops.

3

(-) Residuals from past manure  
production lbs/acre

26

29

soil sample

4

(-) Nutrients supplied by  
commercial fertilizer and  
Biosolids, lbs/acre42.8 lbs.  
manure  
plus

none

NA

5

(-) Nutrients supplied in  
irrigation water, lbs/acre

NA

NA

NA

6

= Additional Nutrients  
Needed, lbs/acre

104 lbs.

2

Fert.  
guidelines

7

Total Nitrogen and  
Phosphorus in manure,  
lbs/ton or lbs/1000 gal  
(from manure test)

8 lbs.

3.1

manure  
sample

8

(x) Nutrient Availability factor,  
for Phosphorus based  
application use 1.0

90%

100%

Deg. 9

9

= Available Nutrients in  
Manure, lbs/ton or  
lbs/1000 gal

7.2 lbs.

3.1

manure  
sample

10

Additional Nutrients  
needed, lbs/acre (calculated  
above)

61.2

2

Guidelines

11

(f) Available Nutrients in  
Manure, lbs/ton or lbs/1000  
gal (calculated above)

7.2

3.1

manure sample

12

= Manure Application  
Rate, tons/acre or 1000  
gal/acre

8500 gal.

645 gal

manure +  
soil sample

Comments:

overapplying on phosphorus based  
applying manure solely for 50 bu. in more phos. uptake  
inject 3,200,000 total gal on 375 ac. 8530 gal./acre



REF # 14741403 BOX # 0  
LAB # NW60195

Date Reported **9/23/2013**

Nutrient In The Soil			Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice				
			VLow	Low	Med	High	Wheat-High Pro.			Wheat-High Pro.			Wheat-High Pro.				
Nitrate	0-6" 6-24"	14 lb/ac 12 lb/ac	*****				YIELD GOAL			YIELD GOAL			YIELD GOAL				
	0-24"	26 lb/ac					45 Bu			50 Bu			55 Bu				
							SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES				
							Band/Maint.			Band/Maint.			Band/Maint.				
							LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION		
							N	118	Customized	N	134	Customized	N	150	Customized		
Phosphorus	Olsen	29 ppm	*****	*****	*****	*****	P <sub>2</sub> O <sub>5</sub>	28	Band *	P <sub>2</sub> O <sub>5</sub>	31	Band *	P <sub>2</sub> O <sub>5</sub>	34	Band *		
Potassium		360 ppm	*****	*****	*****	*****	K <sub>2</sub> O	10	Band (Starter)*	K <sub>2</sub> O	10	Band (Starter)*	K <sub>2</sub> O	10	Band (Starter)*		
Chloride	0-24"	20 lb/ac	*****				Cl	20	Broadcast	Cl	20	Broadcast	Cl	20	Broadcast		
Sulfur	0-6" 6-24"	18 lb/ac 30 lb/ac	*****	*****	*****	*****	S	5	Band (Trial)	S	5	Band (Trial)	S	5	Band (Trial)		
	Boron	0.8 ppm	*****	*****			B	0		B	0		B	0			
Zinc		3.00 ppm	*****	*****	*****	*****	Zn	0		Zn	0		Zn	0			
Iron		34.6 ppm	*****	*****	*****	*****	Fe	0		Fe	0		Fe	0			
Manganese		8.4 ppm	*****	*****	*****	*****	Mn	0		Mn	0		Mn	0			
Copper		2.17 ppm	*****	*****	*****	*****	Cu	0		Cu	0		Cu	0			
Magnesium		251 ppm	*****	*****	*****	*****	Mg	0		Mg	0		Mg	0			
Calcium		6606 ppm	*****	*****	*****	*****	Lime			Lime			Lime				
Sodium		18 ppm	***														
Org.Matter		4.9 %	*****	*****	*****	*****	Soil pH		Buffer pH	Cation Exchange Capacity		% Base Saturation (Typical Range)					
Carbonate(CCE)		4.1 %	*****	*****	*****	*****	0-6" 7.2 6-24" 8.2			36.1 meq		% Ca	% Mg	% K	% Na	% H	
Sol. Salts	0-6" 6-24"	0.41 mmho/cm 0.3 mmho/cm	*****									(65-75) 91.4	(15-20) 5.8	(1-7) 2.6	(0-5) 0.2	(0-5)	

**Crop 3:** The nitrogen guideline for this recommendation has been customized by the submitter. 44 lbs of 0-0-60 = 20 lbs of Chloride" \* Caution: Seed Placed Fertilizer Can Cause Injury \* Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P205 = 34 K2O = 21 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.



# AgSource Laboratories

A Subsidiary of Cooperative Resources International

1532 Dewitt  
Ellsworth, IA 50075  
Tel: 515-836-4444  
Fax: 515-836-4541

## REPORT OF ANALYSIS

<b>Submitted By</b>		
PLEASANT VALLEY COLONY		
734 MCCOY RD		
BELT	MT	59412

<b>Sample Type</b>	Manure
<b>Submitted For</b>	
PLEASANT VALLEY COLONY / DAIRY SLURRY	

<b>Date Received</b>	<b>Date Reported</b>
5/16/2013	5/20/2013

<b>Acc. No.</b>	<b>Laboratory Sample No.</b>
LINC21	16047

### REPORT OF ANALYTICAL RESULTS

#### Client Sample Identification

BLNK

	Analysis As Received	Nutrients as Lbs/1000 gal
Organic Nitrogen, % N	0.09 %	7.3
Ammonium, % N	0.18 %	14.7
Nitrate, % N	%	
Total N (TKN), % N	0.26 %	22
Phosphorus, % P2O5	0.07 %	5.5
Potassium, % K2O	0.25 %	20.8
Sulfur, % S	0.03 %	2.1
Calcium, % Ca	0.17 %	14.2
Magnesium, % Mg	0.04 %	3.3
Sodium, % Na	0.07 %	5.9
Zinc, ppm Zn	7.1 ppm	0.1
Iron, ppm Fe	30.7 ppm	0.3
Manganese, ppm Mn	9 ppm	0.1
Copper, ppm Cu	21.7 ppm	0.2
Soluble Salts, mmho/cm		
pH		
Moisture, %	94.63 %	
Dry Matter, %	5.37 %	



2013 Harris hog manure

Nutrient Budget Worksheet

Field identification: 23424 Year: 2013 Crop: Winter wheat

Expected Crop Yield: 50

Phosphorus index results or Phosphorus application from soil test: 17

Method of Application: Injection

When will application occur: April & Sept

Nutrient Budget		Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	130# for 50 bu. from guideline	31 lbs. Fert. guideline
2	(-)	Credits from previous legume crops, lbs/ac	none	none
3	(-)	Residuals from past manure production lbs/acre	51 lb.	17 soil sample
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	none	none
5	(-)	Nutrients supplied in irrigation water, lbs/acre	NA	NA
6		= Additional Nutrients Needed, lbs/acre	79	14 Fert. guideline
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	24.1	9.5 manure sample
8	(x)	Nutrient Availability factor, for Phosphorus based application use 1.0	90%	100%
9		= Available Nutrients in Manure, lbs/ton or lbs/1000 gal	21.69	9.5 manure sample
10		Additional Nutrients needed, lbs/acre (calculated above)	79	14 Guideline
11	(/)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	21.69	9.5 manure sample
12		= Manure Application Rate, tons/acre or 1000 gal/acre	3642 gal.	1473 gal. manure & soil sample

Comments:

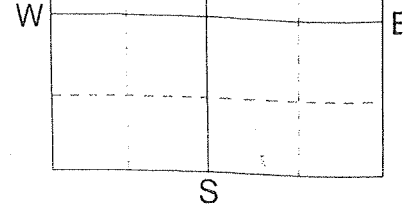
Inject 3,500,000 gal. on 437 ac. = 8,000 gal/acre



P.O. BOX 510, NORTHWOOD, ND 58267  
(701) 597-6010

# SOIL TEST REPORT

FIELD SOUTH WEST HARRIS SAMPLE  
COUNTY  
TWP SECTION  
QTR ACRES  
PREV CROP WINTER WHEAT



## SUBMITTED FOR:

PLEASANT VALLEY COLONY  
734 MCCOY ROAD

BELT, MT

59412

## SUBMITTED BY:

FL4403

PLEASANT VALLEY COLONY  
PETER WIFF PLUMMER  
734 MCCOY RD  
BELT, MT

59412

REF # 12484027

LAB # 22732

BOX # 90

DATE SAMPLED

5/1/13

DATE RECEIVED

5/15/13

DATE REPORTED

5/16/13

### NUTRIENT IN THE SOIL

0-6" 9 lb/ac  
6-24" 42 lb/ac  
0-24" 51 lb/ac

Nitrate N

Olsen Phosphorus 17 ppm

Potassium 239 ppm

Chloride

Sulfur

Boron

Zinc 0.84 ppm

Iron

Manganese

Copper

Magnesium

Calcium

Sodium

Organic Matter 4.2 %

anate (CCE)

uble 0-6" 0.32 meq/100g

alts 6-24" 0.33 meq/100g

### INTERPRETATION

V LOW LOW MED HIGH

|||||

|||||

|||||

|||||

|||||

|||||

|||||

### 1ST CROP CHOICE

YIELD  
GOAL

SUGGESTED GUIDELINES

LB/ACRE APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

### 2ND CROP CHOICE

YIELD  
GOAL

SUGGESTED GUIDELINES

LB/ACRE APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

### 3RD CROP CHOICE

YIELD  
GOAL

SUGGESTED GUIDELINES

LB/ACRE APPLICATION

N

P<sub>2</sub>O<sub>5</sub>

K<sub>2</sub>O

Cl

S

B

Zn

Fe

Mn

Cu

Mg

Lime

Soil  
pH

Buffer  
pH

Cation  
Exchange  
Capacity

% Base Saturation (Typical Range)

% Ca

% Mg

% K

% Na

% H

0-6" 7.7

6-24"

# 2013 dry pack

8206

Year: 2013

Crop: Winter wheat

Field identification: 2965, 2966

Expected Crop Yield: 50 bu.

Phosphorus index results or Phosphorus application from soil test: 28

Method of Application: spreader (pull type)

When will application occur: March and Oct.

Nutrient Budget

		Nitrogen-based Application	Phosphorus-based Application	Source of information
1		130 #	32	Fert. guidelines
2	(-)	none	none	in legume crops
3	(-)	58 lbs.	38	soil sample
4	(-)	36 lbs.		
5	(-)	manure feed	none	NA
6	(-)	NA	NA	NA
7		72	4	Fert. guidelines
8	(x)	10.7	6.2	Manure sample
9		50%	100%	Reg. 9
10		5.35	6.2	Manure sample
11	(/)	5.35	6.2	Manure sample
12		13.45 tons	1.64 tons	Manure + soil sample

Comments:

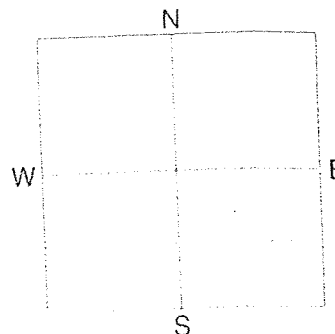
Spread 1175 tons on 181 ac. = 6.52 tons per acre.



Soil Analysis by Agvise Laboratories  
Northwood: (701) 587-6010  
Benson: (320) 843-4109

## SOIL TEST REPORT

FIELD ID  
SAMPLE ID **DRYPACK**  
FIELD NAME  
COUNTY  
TWP  
SECTION QTR ACRES **0**  
PREV. CROP



SUBMITTED FOR:  
**PLEASANT VALLEY COLONY**  
ATTN: **PETER**

SUBMITTED BY: **M04720**  
**MT. VIEW COOP-GREAT FALLS**  
**1700 52ND ST N**  
**GREAT FALLS, MT** **59405**

REF # **13423281** BOX # **0**  
LAB # **NW60270**

Date Sampled **08/28/2012**

Date Received **08/31/2012**

Date Reported **9/6/2012**

Date Sampled08/28/2012

Date Recd

Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
			Wheat-High Pro.		Wheat-High Pro.		Wheat-High Pro.	
			YIELD GOAL		YIELD GOAL		YIELD GOAL	
			40	Bu	50	Bu	60	Bu
			SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES	
			Band/Maint.		Band/Maint.		Band/Maint.	
			LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION
			N	62	N	92	N	122
			P <sub>2</sub> O <sub>5</sub>	25 Band *	P <sub>2</sub> O <sub>5</sub>	31 Band *	P <sub>2</sub> O <sub>5</sub>	38 Band *
			K <sub>2</sub> O	15 Band *	K <sub>2</sub> O	19 Band *	K <sub>2</sub> O	23 Band *
			Cl	16 Broadcast	Cl	16 Broadcast	Cl	16 Broadcast
			S	7 Band (Trial)	S	7 Band (Trial)	S	7 Band (Trial)
			B	0	B	0	B	0
			Zn	0	Zn	0	Zn	0
			Fe	0	Fe	0	Fe	0
			Mn	0	Mn	0	Mn	0
			Cu	0	Cu	0	Cu	0
			Mg	0	Mg	0	Mg	0
			Lime	0	Lime	0	Lime	0
			Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)		
			0-6" 6.8		23.4 meq	% Ca	% Mg	% K
						(65-75) 89.1	(15-20) 8.1	(1-7) 2.6
						(0-5) 0.2	(0-5) 0.2	(0-5) 0.2

General Comments: Fine Loams (CEC range 21 to 30) (Medium)

Crop 1: 35 lbs of 0-0-60 = 16 lbs of Chloride" \* Caution: Seed Placed Fertilizer Can Cause Injury \* Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 25 K2O = 15 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 2: 35 lbs of 0-0-60 = 16 lbs of Chloride" \* Caution: Seed Placed Fertilizer Can Cause Injury \* Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 31 K2O = 19 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 3: 35 lbs of 0-0-60 = 16 lbs of Chloride" \* Caution: Seed Placed Fertilizer Can Cause Injury \* Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 38 K2O = 23 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.



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Ellsworth, IA 50075  
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## REPORT OF ANALYSIS

<b>Submitted By:</b>		
PLEASANT VALLEY COLONY		
734 MCCOY RD		
BELT	MT	59412

<b>Sample Type</b>	Manure
<b>Submitted For:</b>	
PLEASANT VALLEY COLONY / DRY PACK	

<b>Date Received</b>	<b>Date Reported</b>
5/16/2013	5/20/2013

<b>Accr No</b>	<b>Laboratory Sample No</b>
LINC21	16049

### REPORT OF ANALYTICAL RESULTS

#### Client Sample Identification

BLNK

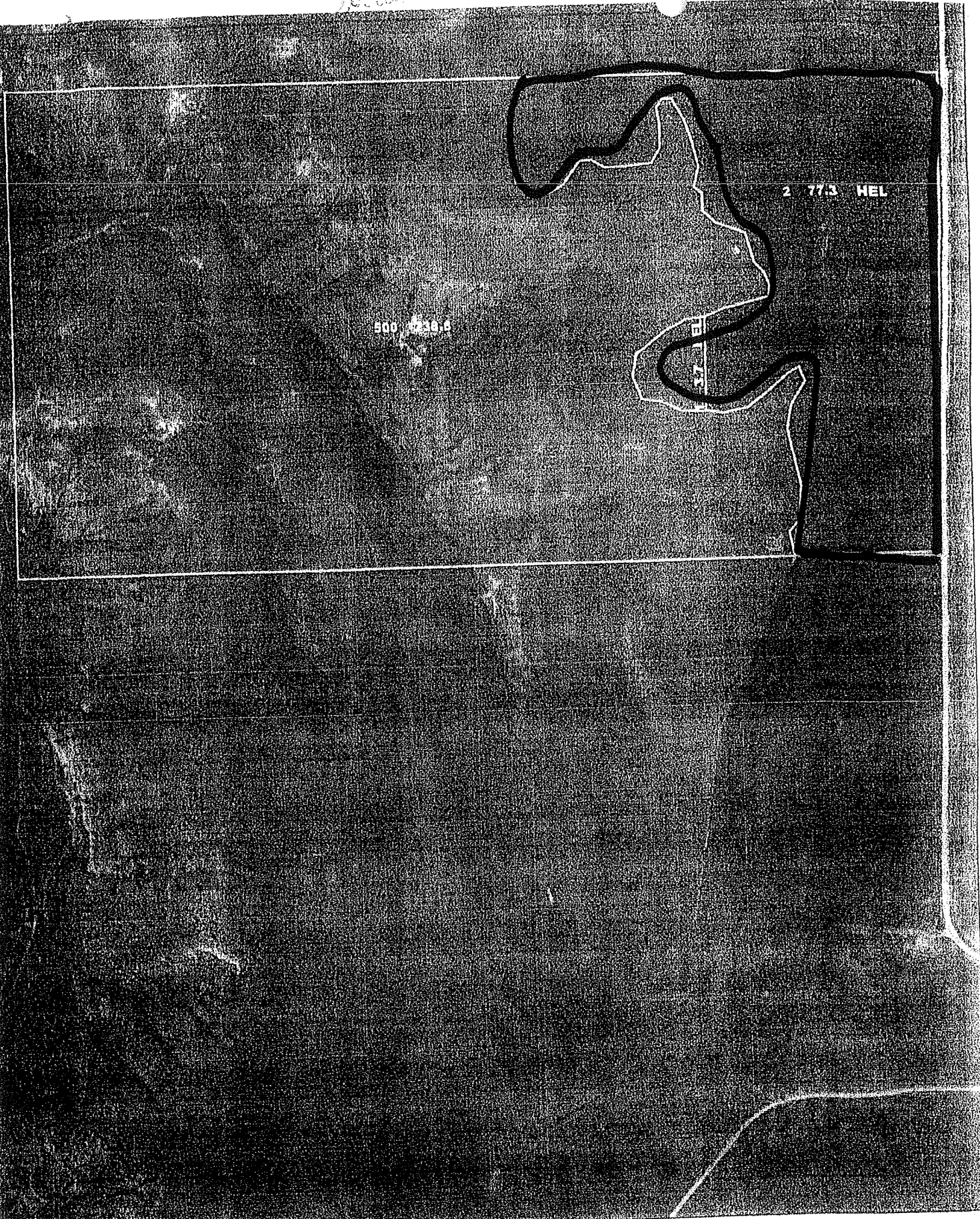
#### Analysis As Received

#### Nutrients as Lbs/Ton

Organic Nitrogen, % N	0.53 %	10.6
Ammonium, % N	0.01 %	0.1
Nitrate, % N	%	
Total N (TKN), % N	0.54 %	10.7
Phosphorus, % P2O5	0.31 %	6.2
Potassium, % K2O	0.8 %	16
Sulfur, % S	0.08 %	1.7
Calcium, % Ca	0.94 %	18.8
Magnesium, % Mg	0.16 %	3.2
Sodium, % Na	0.04 %	0.8
Zinc, ppm Zn	26.4 ppm	0.1
Iron, ppm Fe	5232.9 ppm	10.5
Manganese, ppm Mn	235.5 ppm	0.5
Copper, ppm Cu	11.3 ppm	0
Soluble Salts, mmho/cm		
pH		
Moisture, %	50.95 %	
Dry Matter, %	49.05 %	



10300



2 77.3 HEL

300 18.6

37 EL

Farm: 6347  
Tract: 2966  
legal: 3 18N 5E

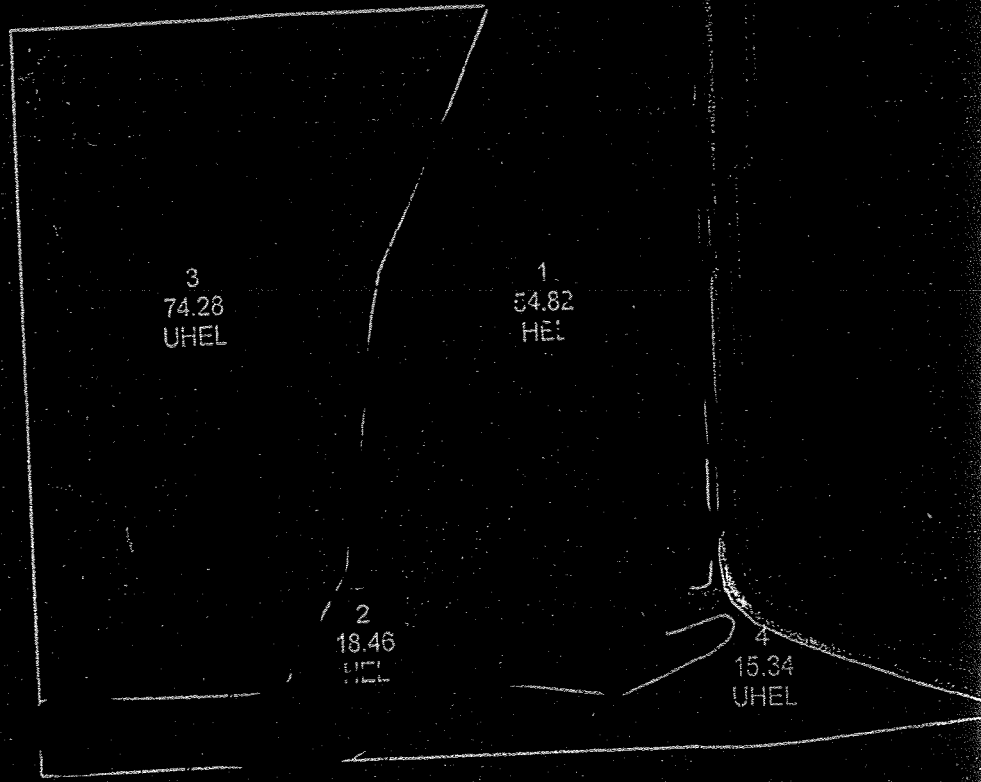
Cascade County FSA

May 7, 2007



*R. ...*

879-12



Day Park to West Glens 40 Acres



Montana

2010

Cascade County FSA

Farm 7582 Tract 2965

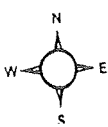
3 18N 5E

West Glens

goes to original

Legend

- ⊙ Restricted Use
- ▽ Limited Restrictions
- ⊠ Exempt from Conservation Provisions
- ⊡ Cropland
- /// Rangeland
- Non Ag Use



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